C-745-T Cylinder Storage Yard

The C-745-T cylinder storage yard (see Fig. 10) is located in the southeast quadrant of the plant immediately south of the USEC C-745-U cylinder storage yard. The C-745-T cylinder storage yard borders Montana Avenue to the north, and Patrol Road 4 to the east, south and west. Access to the yard is available from the north and west sides as well as 3 interior service drives which run from south to north. The cylinder storage yard consists of approximately 470,000 square feet of 14 inch thick concrete cylinder storage area. The cylinder storage yard is divided into four sections separated by three service lanes for cylinder accessibility. Cylinder rows in these sections run south to north with cylinder positions within each row running west to east. In the southeast section of the yard is a boundary demarcation which prohibits the placement of UF₆ cylinders within the area. In accordance with the C-745-T Cylinder Storage Yard Boundary Technical Safety Requirements no cylinders can be transported beyond the boundary demarcation. The boundary is a minimum distance of 900 feet from the Site Boundary. The boundary demarcation consist of nominal 4-foot cylinder chocks, placed approximately 4 feet apart, with an orange mesh, 48-inch high barrier fence supported approximately every 16-feet by metal stanchions. A buffer zone is maintained for a minimum distance of 25 feet from the boundary to the cylinder storage arrays. Signs are posted approximately every 80 feet with a warning that no cylinders can be transported beyond the boundary. A surveillance of the boundary demarcation is required monthly, semi-annually, and annually.



Figure 10. View of C-745-T from the Northeast corner looking West.

The cylinder storage yard storm water drainage system consist of four 18-inch drain lines that run two thirds the length of each of the four sections of the yard from south to north. The concrete surface is sloped to gravity drain storm water into 8 catch basins (two per each drain line). Each of the four drain lines empty into a 24-inch main which runs west along the north side of the yard parallel to Montana Avenue. The main continues past C-745-T and C-745-S cylinder storage yards to Patrol Road 5 where it turns north, increases to 30-inches and follows Patrol Road 5 north past Alabama Avenue where it discharges into KPDES Outfall 017.

The electrical service for the cylinder storage yard consists of fifteen 60-foot security lighting poles serviced by a set of pole mounted transformers. The three transformer set is located in the northwest corner of the yard with each transformer sized at 37.5 kVA/480V-240V. The secondary service is a 480V, 3-phrase, 100 amp power panel located at the base of the transformer pole. The 13.8kV feeder supplies this power and extends overhead around the east, west, and south perimeter of T-yard. A separate 480V patrol road security lighting circuit extends around the east, west, south perimeter of T-yard and is fed from a 10kVA transformer.